

Date=06/07/2020

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IN PREVIOUS LECTURE (QUICK RECAP) Date-03/07/2020	In today's Lecture (Overview)
We learned Parts/Architecture Of Websites	Introduction To Programming language
=What is Full Stack Developer? =What Happens When We Search Any website or url on browser? =What is Dns,vertical scaling, horizontal scaling,Ipconfig command?	What Is a Compiler ?? What Is python ? What is REPL ?? What Is Variables ?? What is Data Types ?? What is the Use Concatenate ?? Commands- Print

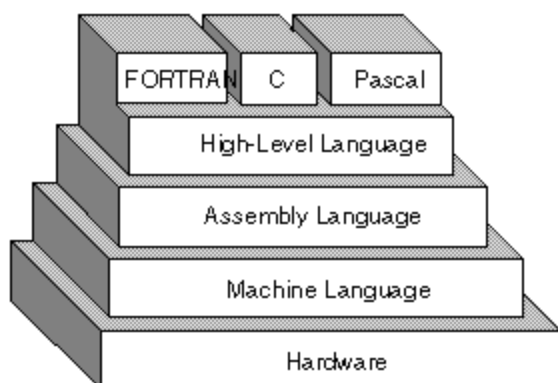
== Introduction **Programming Language**

A **programming language** is a **vocabulary** and set of grammatical rules for **instructing a computer** or computing device to perform specific tasks.

-Computer Understand only **0&1 Language (off&on)**-it is also known as **assembly language**

-We use HLL(High Level Language)

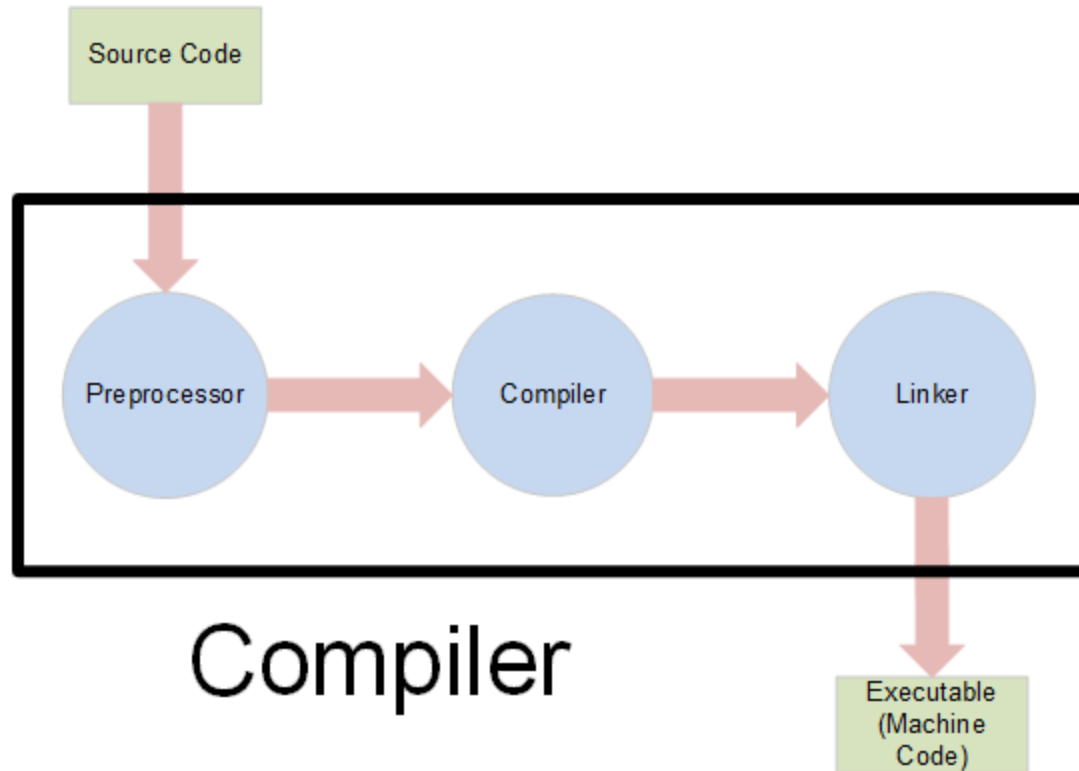
=python,java c#,cobol



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=What is “**Compiler**”?

-A **compiler** is a special program that “**processes statements**” written in a particular programming language and turns them into **machine language or “code”** that a computer's processor **Uses or Understands**



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Fact== -First Industry Language was Introduced by Denis Ritchie Which was Language C

==What is **Python??**

-Python Was Created By **Guido Van Russon**

-**Python** is a general “**purpose**” and “high level programming” language.

-Python Is Known as “**Swiss Knife**” Of Programming Language



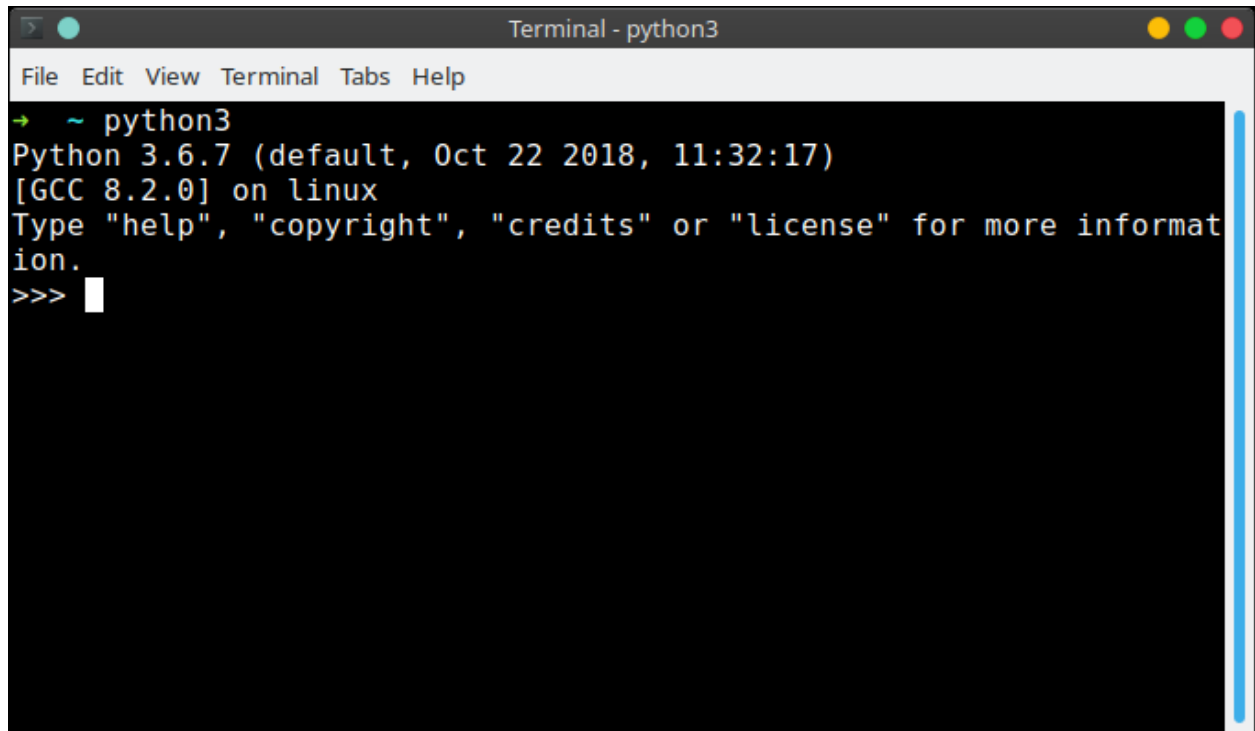
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==What is **REPL??**

Read Evaluate **Print** Loop

- 1. **Read the user input (your Python commands).**
- 2. Evaluate your code (to work out what you mean).
- 3. **Print any results (so you can see the computer's response).**
- 4. Loop back to step 1 (to continue the conversation).

The computer tells you it's waiting for instructions by presenting you with either three chevrons (**>>>**) or a numbered prompt (**In [1]:**). You just type your commands and hit return for the computer to evaluate them.

A screenshot of a terminal window titled "Terminal - python3". The window has a menu bar with "File", "Edit", "View", "Terminal", "Tabs", and "Help". The terminal content shows the command "python3" being executed, followed by the Python 3.6.7 startup banner: "Python 3.6.7 (default, Oct 22 2018, 11:32:17)", "[GCC 8.2.0] on linux", and instructions to type "help", "copyright", "credits" or "license" for more information. The prompt ">>>" is visible at the end of the line.

```
Terminal - python3
File Edit View Terminal Tabs Help
→ ~ python3
Python 3.6.7 (default, Oct 22 2018, 11:32:17)
[GCC 8.2.0] on linux
Type "help", "copyright", "credits" or "license" for more informat
ion.
>>> 
```

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=What Is Variables??

-**"Variables"** are **data values** that can change when the user is asked a question

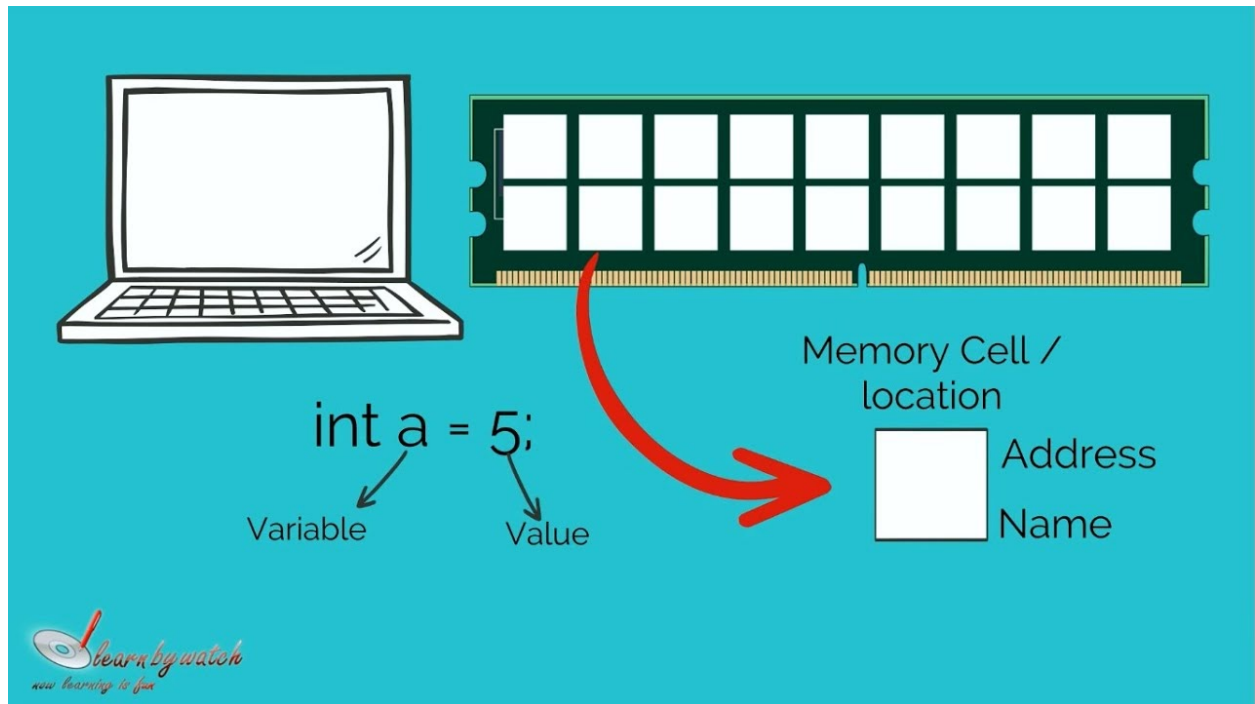
- A **variable** is a **memory location**

-Rule Of Variables=it must have to be start from a-z,A-Z _

=For exp- A=2, a=4, _=3

=In python left hand side will **always have a single value(variable)**

-To Know the Type, **type(variable)** then it will show the type of variables



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=What is **Data Types??**

-In computer science and computer **programming**, a **data type** or simply **type** is an **attribute of data** which tells the compiler or interpreter how the **programmer intends to use the data.**

Common data types

Data type:	Example value:
Integer	35462216
Floating-point	0.002756
Char	H
String	Hello, World!
Boolean	true

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Types of Data Types Explained below

=**int**-function converts the specified value into an integer number.

int('225')



int('225') is : 225

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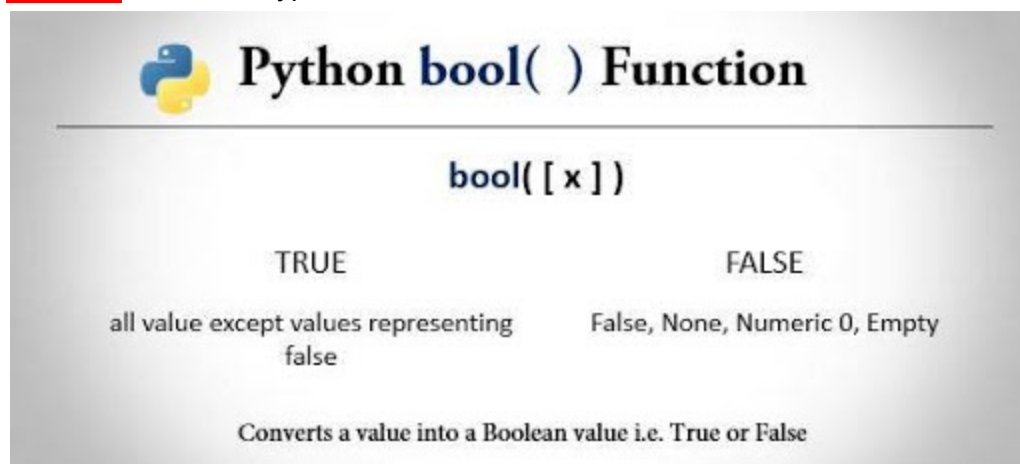
=**str**-String literals can be enclosed by either double or single quotes,

```
PythonExample.py x
1  # Program published on https://beginnersbook.com
2  # Python program to reverse a given String
3  # Using a user-defined function
4  def reverse(str):
5      s = ""
6      for ch in str:
7          s = ch + s
8      return s
9
10
11  # given string
12  mystr = "BeginnersBook"
13  print("Given String: ", mystr)
14
15  # reversed string
16  print("Reversed String: ", reverse(mystr))
17
```

=**float**-This function converts the specified value into a floating point number.

```
Python 3.4.4 Shell
File Edit Shell Debug Options Window Help
Python 3.4.4 (v3.4.4:737efcadf5a6, Dec 20 2015, 19:28:18) [MSC v.1600 32 bit (Intel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>> int(23.34)
23
>>> int(-3.1415)
-3
>>> int(5.0)
5
>>> float(7)
7.0
>>> complex(7,5)
(7+5j)
>>> complex(7)
(7+0j)
>>> |
```

Boolean- This data type is either “True or False.”



The diagram illustrates the Python `bool()` function. At the top, it shows the Python logo followed by the title "Python bool() Function". Below this, the function signature `bool([x])` is displayed. A horizontal line separates the title from the details. Underneath, two columns define the function's behavior: the "TRUE" column states "all value except values representing false", and the "FALSE" column lists "False, None, Numeric 0, Empty". At the bottom, a summary line reads: "Converts a value into a Boolean value i.e. True or False".

NOTE==Anything under Double quote is str &
Int+int=int

=What is the Use Concatenate??

=To create Space Between Variables

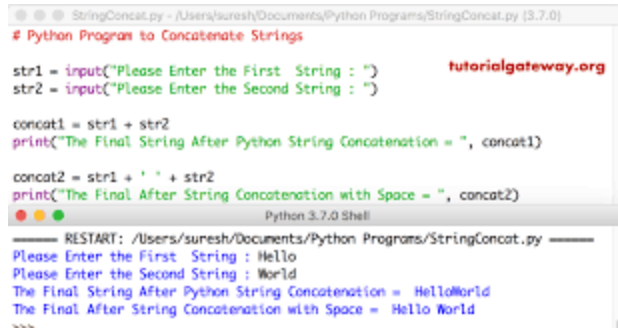
To add a space between them, add a " "

For Example

```

a = "Hello"
b = "World"
c = a + " " + b
print(c)

```



```

StringConcat.py - /Users/suresh/Documents/Python Programs/StringConcat.py [3.7.0]
# Python Program to Concatenate Strings

str1 = input("Please Enter the First String : ")
str2 = input("Please Enter the Second String : ")

concat1 = str1 + str2
print("The Final String After Python String Concatenation = ", concat1)

concat2 = str1 + ' ' + str2
print("The Final After String Concatenation with Space = ", concat2)

Python 3.7.0 Shell

--- RESTART: /Users/suresh/Documents/Python Programs/StringConcat.py ---
Please Enter the First String : Hello
Please Enter the Second String : World
The Final String After Python String Concatenation = HelloWorld
The Final After String Concatenation with Space = Hello World

```

For numbers, the `+` character works as a mathematical operator:

```

x = 5
y = 10
print(x + y)

```

If you try to combine a string and a number, Python will give you an error:

```

x = 5
y = "John"
print(x + y)

```

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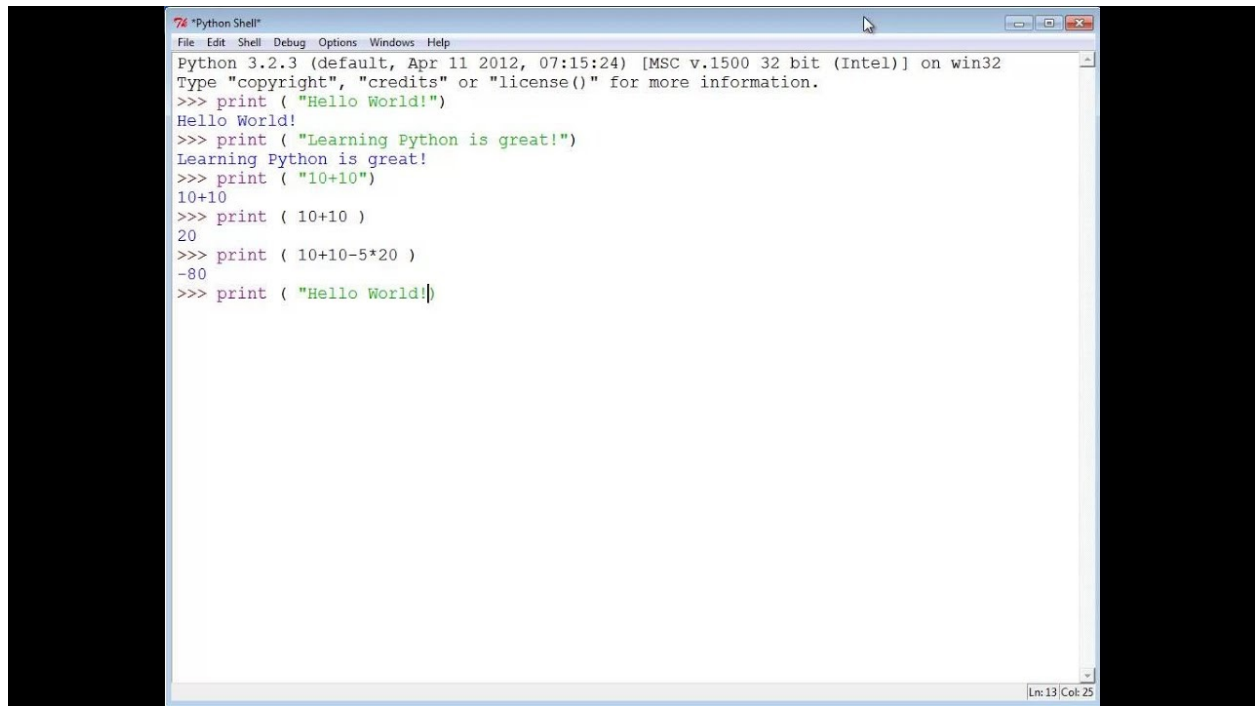
Command

==**Print**

The **print()** function **prints** the specified message to the screen,

-It Prints The word you type on it

-For exp. **print("hello Corona")**



A screenshot of a Python Shell window titled "Python Shell". The window has a menu bar with "File", "Edit", "Shell", "Debug", "Options", "Windows", and "Help". The main text area displays the following content:

```
Python 3.2.3 (default, Apr 11 2012, 07:15:24) [MSC v.1500 32 bit (Intel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>> print ( "Hello World!")
Hello World!
>>> print ( "Learning Python is great!")
Learning Python is great!
>>> print ( "10+10")
10+10
>>> print ( 10+10 )
20
>>> print ( 10+10-5*20 )
-80
>>> print ( "Hello World!")
```

The status bar at the bottom right indicates "Ln: 13 | Col: 25".

["Click Here"](#) to Know More about it.